

**AMENDMENTS TO THE CLAIMS:**

The listing of claims will replace all prior versions, and listings of claims in the application:

**LISTING OF CLAIMS:**

1. (Currently amended) A server-based method of submitting a plurality of bids to a competitive bidding process for an advertiser for placement of at least one advertisement, the method including:

a) selecting at least one candidate advertisement associated with the advertiser;  
b) selecting an initial plurality of candidate keywords;  
c) expanding the initial plurality of candidate keywords selected in b) based at least in part on the at least one candidate advertisement selected in a) to form an expanded plurality of candidate keywords;

d) creating an advertisement-keyword pair for each candidate advertisement selected in a) and each candidate keyword, wherein each advertisement-keyword pair includes one or more keywords of the expanded plurality of candidate keywords resulting from c);

e) estimating a click-through rate for each advertisement-keyword pair created in d);

f) calculating a return on advertising investment (ROAI) for each advertisement-keyword pair created in d) based at least in part on the corresponding click-through rate estimated in e);

g) calculating an optimized bid for each advertisement-keyword pair created in d) based at least in part on the corresponding ROAI calculated in f); and

h) automatically submitting the optimized bids calculated in g) to the competitive bidding process for placement of each candidate advertisement selected in a) in search results lists generated in response to search queries comprising at least one keyword of the expanded plurality of candidate keywords resulting from c).

2. (Previously presented) The method as set forth in claim 1 wherein at least two candidate advertisements are selected in a).
3. (Previously presented) The method as set forth in claim 1 wherein at least one of the initial plurality of candidate keywords and the expanded plurality of candidate keywords is based at least in part on information provided by the advertiser.
4. (Previously presented) The method as set forth in claim 1 wherein the expanded plurality of candidate keywords is automatically generated based at least in part from the initial plurality of candidate keywords which is based at least in part on information provided by the advertiser.
5. (Previously presented) The method as set forth in claim 1 wherein at least one of the initial plurality of candidate keywords and the expanded plurality of candidate keywords is automatically generated based at least in part from content in an advertiser web site.
6. (Previously presented) The method as set forth in claim 1 wherein at least one of the initial plurality of candidate keywords and the expanded plurality of candidate keywords is automatically generated based at least in part from content of the at least one candidate advertisement.
7. (Previously presented) The method as set forth in claim 1 wherein at least one of the initial plurality of candidate keywords and the expanded plurality of candidate keywords is automatically generated based at least in part from two or more of at least one candidate keyword provided by the advertiser, content in an advertiser web site, and content of the at least one candidate advertisement.
8. (Previously presented) The method as set forth in claim 1 wherein the click-through rate for each advertisement-keyword pair is estimated by placing the corresponding candidate advertisement in a search results list on a trial basis.

9. (Previously presented) The method as set forth in claim 1 wherein the click-through rate for each advertisement-keyword pair is estimated based at least in part on the relevance of content in the corresponding candidate advertisement to the one or more candidate keywords for the corresponding advertisement-keyword pair.

10. (Previously presented) The method as set forth in claim 1 wherein the estimated click-through rate for each advertisement-keyword pair is periodically revised based on actual search queries, search results lists, and click-throughs corresponding to the advertisement-keyword pair.

11. (Previously presented) The method as set forth in claim 1, the ROAI calculating in f) further including:

tracking the advertisement-keyword pair at the time a user clicks on the corresponding advertisement in the search results list;

tracking a revenue event and corresponding revenue amount associated with sales through an advertiser web site associated with the search results list; and

associating the tracked advertisement-keyword pair clicks with the tracked revenue events and corresponding revenue amounts.

12. (Original) The method as set forth in claim 11 wherein tracking the advertisement-keyword pair is accomplished at least in part by using one or more of a tracking URL, a form, and a cookie.

13. (Original) The method as set forth in claim 11 wherein the revenue event includes at least one of a sale, a lead generation, and a form submission.

14. (Original) The method as set forth in claim 11 wherein the revenue event and corresponding revenue amount are stored in a database associated with the advertiser web site.

15. (Original) The method as set forth in claim 11 wherein an image bug is placed on the advertiser web site and the revenue event and corresponding revenue amount are stored in a service provider web site.

16. (Original) The method as set forth in claim 11 wherein the revenue event and corresponding revenue amount is stored in a database associated with the advertiser web site.

17. (Previously presented) The method as set forth in claim 11 wherein the ROAI calculating in f) further includes:

receiving the associated tracked advertisement-keyword pair clicks and tracked revenue events and revenue amounts.

18. (Previously presented) The method as set forth in claim 17 wherein the associated tracked advertisement-keyword pair clicks and tracked revenue events and revenue amounts are received by at least one of file transfer protocol (FTP) data transfer and web services.

19. (Previously presented) The method as set forth in claim 11 wherein the ROAI calculating in f) further includes:

considering the relevance of the advertiser web site to the advertisement-keyword combination.

20. (Previously presented) The method as set forth in claim 11 wherein the ROAI calculating in f) further includes:

considering an experience level in a user associated with submission of the search query and selection of an advertisement in the corresponding search results list, wherein the experience level is in relation to at least one of the advertisement in the advertisement-keyword combination, the keyword in the advertisement-keyword combination, the advertiser, the advertiser web site, products associated with the advertiser, and services associated with the advertiser.

21. (Previously presented) The method as set forth in claim 1 wherein the calculated ROAI for each advertisement-keyword pair is based at least in part on information received from the advertiser.

22. (Canceled)

23. (Previously presented) The method as set forth in claim 1 wherein the optimized bids calculated in g) are optimized based at least in part on optimization of ROAI for at least one of the candidate advertisement and the one or more candidate keywords associated with the corresponding advertisement-keyword pair.

24. (Previously presented) The method as set forth in claim 23, further including:  
recommending an optimal set of bid combinations with respect to profitability for the advertiser creating a corresponding automatic insertion order for placing the advertisement-keyword combinations.

25. (Original) The method as set forth in claim 24 wherein the set of bid combinations is sorted by a product of the click-through rate and ROAI and insertion orders are placed in the sorted order.

26. (Original) The method as set forth in claim 24 wherein the advertiser constrains the set of bid combinations by at least one of an advertisement budget and a capacity budget.

27. (Original) The method as set forth in claim 26 wherein the advertiser constraint is a maximum budget amount for a predetermined period of time.

28. (Original) The method as set forth in claim 26 wherein the advertiser constraint is a desired number of click-throughs for a predetermined period of time.

29. (Original) The method as set forth in claim 26 wherein the advertiser constraint is at least one of a multiplier of ROAI and a desired profit margin with respect to ROAI.

30. (Original) The method as set forth in claim 26 wherein the advertiser constraint is at least one of a maximum budget amount for a predetermined period of time, a desired number of click-throughs for a predetermined period of time, a multiplier of ROAI, and a desired profit margin with respect to ROAI.

31. (Currently amended) A server-based apparatus for submitting a plurality of bids to a competitive bidding process for an advertiser for placement of at least one advertisement, the apparatus including:

- an advertisement selection logic for selecting at least one candidate advertisement associated with the advertiser;

- a keyword identification system for selecting an initial plurality of candidate keywords and for expanding the initial plurality of candidate keywords;

- an advertisement-keyword selection system in communication with the advertisement selection logic and keyword identification system for creating an advertisement-keyword pair for each candidate advertisement and each candidate keyword, wherein each advertisement-keyword pair includes one or more keywords of the expanded plurality of candidate keywords, ~~keywords~~ pair for estimating a click-through rate for each advertisement-keyword pair, ~~pair~~ and for calculating a return on advertising investment (ROAI) for each advertisement-keyword pair based at least in part on the corresponding click-through rate; and

- a bid determination system in communication with the advertisement-keyword selection system for calculating an optimized bid for each advertisement-keyword pair based at least in part on the corresponding ROAI and for automatically submitting the optimized bids to the competitive bidding process for placement of each candidate advertisement in search results lists generated in response to search queries comprising at least one keyword of the expanded plurality of keywords.

32. (Previously presented) The apparatus as set forth in claim 31 wherein the keyword identification system automatically generates at least one of the initial plurality of candidate keywords and the expanded plurality of candidate keywords from one or more of at least one candidate keyword provided by the advertiser, content in an advertiser web site, and content of the at least one candidate advertisement.

33. (Previously presented) The apparatus as set forth in claim 31, the advertisement-keyword selection system further including:

an ROAI agent for tracking the advertisement-keyword pair at the time a user clicks on the corresponding advertisement in the search results list, tracking a revenue event and corresponding revenue amount associated with sales through an advertiser web site associated with the search results list, and associating the tracked advertisement-keyword pair clicks with the tracked revenue events and corresponding revenue amounts.

34. (Original) The apparatus as set forth in claim 33 wherein the ROAI agent also receives the associated tracked advertisement-keyword pair clicks and tracked revenue events and revenue amounts.

35. (Original) The apparatus as set forth in claim 33 wherein the ROAI agent also considers the relevance of the advertiser web site to the advertisement-keyword combination.

36. (Original) The apparatus as set forth in claim 33 wherein the ROAI agent also considers an experience level in a user associated with submission of the search query and selection of an advertisement in the corresponding search results list, wherein the experience level is in relation to at least one of the advertisement in the advertisement-keyword combination, the keyword in the advertisement-keyword combination, the advertiser, the advertiser web site, products associated with the advertiser, and services associated with the advertiser.

37. (Previously presented) The apparatus as set forth in claim 31 wherein the optimized bids determined by the bid determination system are optimized based at least in part on optimization of ROAI for at least one of the candidate advertisement and the one or candidate keywords associated with the corresponding advertisement-keyword pair.

38. (Original) The apparatus as set forth in claim 37 wherein the bid determination system recommends an optimal set of bid combinations with respect to profitability for the advertiser creating a corresponding automatic insertion order for placing the advertisement-keyword combinations.

39. (Original) The apparatus as set forth in claim 38 wherein the bid determination system sorts the optimal set of bid combinations by a product of the click-through rate and ROAI and insertion orders are placed in the sorted order.

40. (Currently amended) A server-based method of submitting a plurality of bids to a competitive bidding process for an advertiser for placement of at least one advertisement, the method including:

- a) selecting at least one candidate advertisement associated with the advertiser;
- b) selecting a plurality of candidate publisher web pages, wherein each candidate publisher web page is associated with one or more candidate advertisement selected in a) and includes one or more auctioned advertisement positions;
- c) creating an advertisement-publisher web page pair for each candidate advertisement selected in a) and each candidate publisher web page selected in b);
- d) estimating a click-through rate for each advertisement-publisher web page pair created in c);
- e) calculating a return on advertising investment (ROAI) for each advertisement-publisher web page pair created in c) based at least in part on the corresponding click-through rate estimated in d);
- f) calculating an optimized bid for each advertisement-publisher web page pair created in c) based at least in part on the corresponding ROAI calculated in e); and



g) automatically submitting the optimized bids calculated in f) to the competitive bidding process for placement of each candidate advertisement selected in a) in at least one publisher web page of the plurality of candidate publisher web pages selected in b).

41. (Previously presented) The method as set forth in claim 40, the ROAI calculating in e) further including:

tracking the advertisement-publisher web page pair at the time a user clicks on the corresponding advertisement in the corresponding publisher web page;

tracking a revenue event and corresponding revenue amount associated with sales through an advertiser web site associated with the corresponding publisher web page; and

associating the tracked advertisement-publisher web page pair clicks with the tracked revenue events and corresponding revenue amounts.

42. (Currently amended) A server-based method of submitting a bid to a competitive bidding process for an advertiser for placement of an advertisement, the method including:

a) selecting at least one candidate advertisement associated with the advertiser;

b) selecting one or more optimized-keywords based at least in part on content of the at least one candidate advertisement selected in a) to optimize the keyword selecting and provide one or more optimized keywords;

c) creating an advertisement-keyword pair for each candidate advertisement selected in a) and each optimized keyword selected in b), wherein each advertisement-keyword pair includes one or more optimized keywords;

d) calculating an optimized bid for each advertisement-keyword pair created in c) based at least in part on the one or more optimized keywords selected in b); and

e) automatically submitting the optimized bids calculated in d) to the competitive bidding process for placement of each candidate advertisement selected in a) in search results lists generated in response to search queries comprising at least one keyword of the one or more optimized keywords selected in b).

43. (Previously presented) The method as set forth in claim 42 wherein the optimized bids calculated in d) are based at least in part on information from the advertiser.

44. (Previously presented) The method as set forth in claim 42 wherein the at least one candidate advertisement selected in a) is based at least in part on information from the advertiser and matching content of each candidate advertisement to one or more candidate keywords, wherein the matching of content is at least partially automated.

45. (Previously presented) The method as set forth in claim 42 wherein the one or more optimized keywords selected in b) are based at least in part on information from the advertiser; and wherein the one or more optimized keywords associated with each advertisement-keyword pair in c) are based at least in part on information from the advertiser.

46. (Previously presented) The method as set forth in claim 42, further including:  
collecting information from an advertiser web site associated with the advertisement, wherein the advertiser web site information includes at least web site visits and web site sales; and

determining a return on advertising investment (ROAI) for each advertisement-keyword pair based at least in part from the advertiser web site information, wherein the determined ROAI is considered in calculating the corresponding optimized bid in d).

47. (Currently amended) The method as set forth in claim 42, further including:  
receiving advertisement management information from ~~a user associated with the~~ an advertiser via an input device, wherein the ~~user~~ advertisement management information is considered in calculating the optimized bids in d).

48. (Previously presented) The method as set forth in claim 42, further including:  
collecting information from a keyword search engine associated with the search results list, wherein the keyword search engine information is associated with at least one of current bids for placement of advertisements and previous search queries, and

wherein the keyword search engine information is considered in calculating the optimized bids in d).

49. (Previously presented) The method as set forth in claim 42, further including:  
collecting information from an advertising aggregator associated with the search results list, wherein the advertising aggregator information is associated with at least one of current bids for placement of advertisements and previous search queries, and wherein the advertising aggregator information is considered in calculating the optimized bids in d).

50. (Previously presented) The method as set forth in claim 42, further including:  
collecting information from a bidding service provider associated with the search results list, wherein the bidding service provider information is associated with at least one of current bids for placement of advertisements and previous search queries, and wherein the bidding service provider information is considered in calculating the optimized bids in d).

51. (Previously presented) The method as set forth in claim 42, further including:  
collecting information from an advertiser web site associated with the advertisement, wherein the advertiser web site information is considered in calculating the optimized bids in d).

52. (Previously presented) The method as set forth in claim 42, further including:  
collecting information from a competitor web site associated with a competitor in relation to the advertiser, wherein the competitor web site information is considered in calculating the optimized bids in d).

53. (Canceled)

54. (Canceled)

55. (Previously presented) The method as set forth in claim 1, wherein calculating the ROAI in f) is based at least in part on historical sales data from sales made on an advertiser's website that are associated with at least one keyword of the expanded plurality of candidate keywords and a cost per click associated with the keyword in order to determine a value of the keyword.

56. (Previously presented) The method as set forth in claim 1, wherein an advertiser that drops out of the competitive bidding process for a given advertisement-keyword pair is presented with alternative keywords, the method further comprising:

determining that the optimized bid associated with the given advertisement-keyword pair will not win in the competitive bidding process;

performing a search query to find alternative keywords similar to the one or more candidate keywords associated with the given advertisement-keyword pair;

repeating e) through h) for the given advertisement-keyword pair with one or more alternative keywords substituted for at least one candidate keyword associated with the given advertisement-keyword pair .

57. (Currently amended) A server-based computer program product for use with an apparatus for submitting a bid to a competitive bidding process for an advertiser for placement of an advertisement, the computer program product including:

a computer usable medium having computer readable program code embodied in the medium for causing:

i) selection of at least one candidate advertisement associated with the advertiser;

ii) selection of an initial plurality of candidate keywords;

iii) expansion of the initial plurality of candidate keywords selected in ii) to form an expanded plurality of candidate keywords;

iv) creation of an advertisement-keyword pair for each candidate advertisement selected in i) and each candidate keyword, wherein each advertisement-keyword pair includes one or more keywords of the expanded plurality of candidate keywords resulting from iii);

v) determination of an optimized bid for each advertisement-keyword pair created in iv); and

vi) automatic submission of the optimized bids determined in v) to the competitive bidding process for placement of each candidate advertisement selected in i) in search results list generated in response to search queries comprising at least one keyword of the expanded plurality of candidate keywords resulting from iii).

58. (Previously presented) The method of claim 1, wherein the optimized bids calculated in g) are based at least in part on an aggressiveness setting which optimizes bidding strategy based on sales and visitor data, ROAI, current and historical bidding data.

59. (Previously presented) The method of claim 1, further comprising:

performing a competition assessment in which a competition assessment agent collects and analyzes information from at least one competitor's website to select one or more competitor keywords, wherein at least one of the initial plurality of candidate keywords and the expanded plurality of candidate keywords is based at least in part on the competitor keywords from the competition assessment.

60. (Previously presented) The method of claim 59, further comprising:

calculating a competitor ROAI for each competitor keyword based at least in part on the competition assessment, wherein the optimized bids calculated in g) are based at least in part on competitor ROAIs for competitor keywords related to the one or more candidate keywords for advertisement-keyword pairs for corresponding optimized bids.